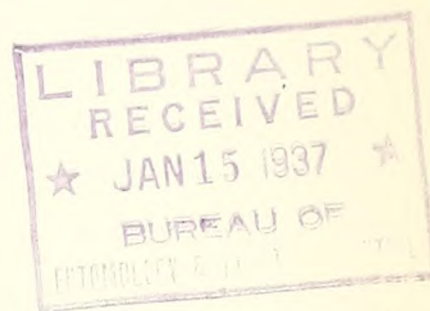


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INSECT PEST SURVEY BULLETIN

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INSECT NOTES FROM COSTA RICA IN 1935

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This paper is supplemental to the Insect Notes from Costa Rica in 1934, published as a Supplement to No. 4, Insect Pest Survey Bulletin, Vol. 15, 1935.

The list does not represent the complete collection for the year, but only those notes that give additional data to the previous year.

The same arrangement has been followed as in the previous list. It is not deemed necessary to reissue the map of Costa Rica, as it may be consulted in the original paper. The abbreviations for the localities given in the previous list apply in this one.

COLEOPTERA

Insect and locality	C o l l e c t e d o n		Date and notes
ANTHICIDAE			
Anthicus asphaltinus Champ. Paso Ancho	<p> <i>Annona muricata</i> <i>Brassica pekinensis</i> <i>Citrus aurantifolia</i> <i>Citrus nobilis</i> <i>Citrus sinensis</i> <i>Cornutia cymosa</i> </p>	<p> <i>Dahlia rosea</i> <i>Hibiscus rosa-sinensis</i> <i>Impatiens balsamina</i> <i>Phytolacca octandra</i> <i>Psidium guajava</i> <i>Vitis</i> spp. </p>	<p> January, February, May, August, October, December </p>
Notoxus eximius Champ. Guadalupe San Pedro	<p> <i>Cinnamomum camphora</i> <i>Coffea arabica</i> <i>Epidendrum</i> sp. <i>Eugenia uniflora</i> </p>	<p> <i>Malus sylvestris</i> <i>Persea americana</i> <i>Tabebuia pentaphylla</i> </p>	<p> January August to November </p>
BRENTHIDAE			
Brentus mexicanus Boh. San Jose San Pedro	<p> <i>Acnistus arborescens</i> <i>Annona cherimola</i> <i>Coreopsis lanceolata</i> <i>Dombeya wallichi</i> </p>	<p> <i>Panicum barbinodes</i> <i>Persea americana</i> <i>Poinsettia pulcherrima</i> </p>	<p> April, in flowers June, at sap in wound August, October to December </p>
CANTHARIDAE			
Chauliognathus histrio (Dej.) San Pedro	<p> <i>Iris laevigata</i> </p>		<p> June </p>
CARABIDAE			
Euproctus subdeletus Bates San Pedro	<p> <i>Persea drymifolia</i> </p>		<p> January </p>
Lebia soror Chaud. Waldeck	<p> <i>Theobroma cacao</i> </p>		<p> April </p>

Insect and locality	C o l l e c t e d o n	Date and notes
CERAMBYCIDAE		
Acanthoderes circumflexus Dw. Santa Rosa de Cartago	Citrus sinensis	September
Callichroma holochlora Bates Liberia	Zea mays	February
Esthlogena porosa Bates San Jose	Ficus carica	September, in dry rolled leaf
Hippopsis lemniscata (F.) San Pedro	Chrysanthemum sp.	June
Ochresthes pollinosus (Chevr.) San Pedro	Acnistus arborescens	December
Pterichthya pisciformis Thomson San Pedro	Chayota edulis	October
Ptychodes lecontei Thomson Liberia	Calathea insignis	July
CHRYSOMELIDAE		
Allochroma sexmaculatum Clark San Pedro	Chayota edulis Zea mays	June July
Altica amethystina Oliv. San Pedro	Phaseolus vulgaris	December
Asphaera nobilitata (F.) Waldeck	Panicum maximum	July
Calligrapha elegantula Jacoby El Pisote		September

Insect and locality	C o l l e c t e d o n	Date and notes
Cerotoma rogersi Jacoby Juan Vinas Pejivalle San Pedro Santiago	Amygdalus persica Panículum maximum Phaseolus lunatus Zea mays	Throughout year
Cerotoma salvini Baly Descamparados El Pisote San Pedro	Chayota edulis Cucurbita pepo Galinzoga hispida Impatiens balsamina	July to December
Chirida guttata (Oliv.) San Pedro Waldeck	Ipomoea sp. Phaseolus vulgaris Zea mays	July
Colaspis fulvotestacea Ief. Waldeck	Theobroma cacao	April
Colaspis prasina Ief. Sarchi	Chayota edulis Vernonia brachiata	January October, November
Colaspis sculpta Jacoby Waldeck	Theobroma cacao	April July
Colaspis submetallica Jacoby Waldeck	Theobroma cacao	April July
Crytocephalus trizonatus Suffr. Gundalupe	Annona cherimola Byrsonima crassifolia	Citrus limonia Coffea arabica

Insect and locality	C o l l e c t e d o n	Date and notes
Cryptocephalus trizonatus-Cont'd San Jose San Juan	Croton gossypifolium Eugenia uniflora Ficus carica Gerbera jamesoni Lactuca sativa Ligustrum japonicum Malus sylvestris	Parkinsonia aculeata Prunus salicina Pyrus communis Rosa sp. Schinus molle Spondias mombin
Ctenochira cumulata (Boh.) Orosi San Pedro Waldeck	Chayota edulis Cornutia cymosa Gramineae (grass) Ipomoea sp.	March July October
Ctenochira vivida (Boh.) Waldeck	Ipomoea sp.	July
Diabrotica balteata Lec.	Ageratum conyzoides Asparagus officinalis Beaumontia grandiflora Beta vulgaris crassa Canarium odoratum	Brassica oleracea capitata Citrus aurantium Datura stramonium Daucus carota Phaseolus lunatus Vicia faba
Diabrotica fulvicornis Jacoby Cartago Juan Vinas	Acnistus arborescens Chayota edulis Codiaeum variegatum Datura candida Erythrina glauca	Euphorbia spp. Hibiscus rosa-sinensis Phaseolus vulgaris Spondias mombin Zea mays
Diabrotica fulvosignata Baly Waldeck	Theobroma cacao	January July

Insect and locality	C o l l e c t e d o n	Date and notes
Diabrotica nummularis Harold Juan Vinas San Jose San Juan San Pedro San Rafael	Allamanda cathartica Brassica pekinensis Beta vulgaris crassa Casimiroa edulis Cestrum nocturnum Chenopodium ambrosioides Citrus aurantium Citrus nobilis Coffea arabica Colocasia esculenta Conostegia lanceolata Dahlia rosea Datura candida Datura stramonium Daucus carota Fortunella margarita Hemerocallis sp. Lactuca sativa	July Important injury to dahlia, allamanda, and pe-tsai. <u>Zelus ruficeps</u> Stal eating this beetle on July 11.
Diabrotica porracea Harold Barba El Pisote San Jose San Isidro San Rafael	Anygdalus persica Dahlia rosea Gladiolus sp. Ipomoea sp. Pennisetum clandestinum	Important injury to snap beans
Diabrotica theimeii Baly San Pedro	Chayota edulis	October
Diabrotica viridula (F.) San Pedro	Impatiens balsamina Vicia faba	January
	Lippia berlandieri Lycopersicum esculentum Myosotis sylvatica Panicum barbinode Phaseolus lunatus Poinsettia pulcherrima Prunus salicina Psidium molle Pyrus communis Roystonea regia Solanum torvum Solanum wendlandi Sterculia diversifolia Trichilia havanensis Tropaeolum majus Verbesina turbacensis Pennisetum purpureum Persea americana Phaseolus vulgaris Tripsacum latifolia Zantedeschia aethiopica	

Insect and locality	C o l l e c t o n		Date and notes
Diabrotica vittata (F.) Tres Rios	Allium cepa Brassica oleracea capitata	Brassica pekinensis Daucus carota Persea americana	January Serious injury April to pe-tsai cabbage
Disonychia trifasciata Clark Paso Ancho Waldeck	Musa sapientum Spondias mombin		July August
Epitrix fuscata (Duv.) San Pedro San Rafael	Acnistus arborescens Cleome spinosa Datura stramonium Gramineae (grass)	Ipomoea batatas Ipomoea tiliacea Phaseolus vulgaris	
Galeruca encaustica Germ.	Chayota edulis Erythrina rubrinervia Hedychium coronarium	Vernonia brachiata Zea mays	
Homophoeta cyanipennis octo- maculata (Grotch) La Irma Pejivalle San Antonio San Jose	Ananas sativus Annona squamosa Asclepias curassavica Brassica japonica Citrus limonia Codiaeum variegatum Crotalaria spectabilis Datura candida Datura suaveolens	Triticum carica Lycopersicum esculentum Mangifera indica Oryza sativa Panicum barbinode Poinsettia pulcherrima Punica granatum Rheedia edulis	January
Malacorhinus decempunctatus Jacoby Waldeck	Theobroma cacao		July
Metriorhiza angularis (Champ.) Waldeck	Ipomoea sp.		July

Insect and locality	Collected on	Date and notes
Metriona emarginata (Boh.) Guadalupe	Chayota edulis Coffea arabica	June September
Metriona judaica (F.) Waldeck	Coix lacryma-jobi	July
Metriona propinqua (Dej.) Waldeck	Coix lacryma-jobi	July
Metriona puella (Boh.) Waldeck	Elaeis guineensis Ipomoea sp.	July
Metriona zona (F.) Waldeck	Ipomoea sp.	July
Nodonota irazuensis (Jacoby) Barba Paraíso San Jose	<p>Albizzia lophantha Alnus acuminata Amygdalus davidiana Ancistus arborescens Annona squamosa Artemisia a tsinthium Asparagus officinalis Averrhoa carambola Bauhinia monandra Byrsonima crassifolia Canna indica Capsicum annuum Cassia sophora Cedrela montana mexi- cana Ceiba pentandra Chrysanthemum maximum Chrysophyllum cainito Citharexylum caudatum Citrus aurantium</p>	<p>Destroying buds of zinnia and leaves of heliotrope</p> <p>Damaged tip of <u>Prunus</u> <u>davidiana</u> and <u>P.</u> <u>salicina</u></p> <p>Destroyed flowers of African daisy</p>

Insect and locality	C o l l e c t e d o n	Date and place
Nodonota irazuensis - Cont'd.	<p>Inga laurina Lagerstroemia speciosa Lantana camara Lucuma mammosa Lupinus sp. Melaleuca leucadendron Nicotiana tabacum Passiflora quadrangul- laris Pennisetum clandestin- um Persea pittieri Phaseolus lunatus Plantago major Poinsettia pulcherrima</p>	<p>Polygonum acre Prunus salicina Psidium molle Punica granatum Rheeda edulis Rosmarinus officinal- is Solanum nigrum Tabebuia guayacan Tagetes patula Taraxacum officinale Thespesia populnea Trema micrantha Triumfetta josefina Zinnia elegans</p>
<p>Nodonota lateralis (Jacoby) Juan Vinas Paso Ancho San Jose</p>	<p>Acnistus arborescens Annona squamosa Asparagus officinalis Canarium odoratum Citrus aurantifolia Cobaea scandens Codium variegatum Conocarpus velutina Corchorus lanceolatus Croton gossypifolius Dahlia rosea Daucus carota Dombeya wallichii Gliricidia maculata</p>	<p>Seriously damaging dahlia and lupine flowers</p>
<p>Oedionychis reichiei Harold Juan Vinas</p>	<p>Vernonia brachiata</p>	<p>August</p>

Insect and locality	C o l l e c t e d o n		Date and notes
Oedionychis tenuicincta Jacoby	Dombeya wallichii		August
Pachybrachys femoratus (Oliv.)	Arracacia xanthorrhiza	Psidium guajava	
Paraíso	Asparagus officinalis	Sterculia diversifolia	
Paso Ancho	Cupressus benthami		
	Hibiscus rosa-sinensis	Vitis tiliaefolia	
	Lippia berlandieri	Zinnia elegans	
CIERIDAE			
Enoclerus villicus (Gorh.)	Chayota edulis		June
Paso Ancho	Jussiaea decurrens		July
San Pedro	Zea mays		August, October
COCCINELLIDAE			
Epilachna abrupta Gorh.	Cestrum macrophyllum	Zea mays	May
San Isidro de Coronado	Erythrina rubrinervia		July
San Pedro	Solanum aculeatissimum		August
Epilachna borealis (F.)	Chayota edulis		June to August Serious injury
Epilachna varivestis Muls.	Chayota edulis		August Serious injury
San Jose			September
San Pedro			
Epilachna defecta Muls.	Ammona cherimola	Conostegia lanceolata	
San Jose	Capsicum annuum	Cucurbita pepo	
	Cestrum aurantiacum		
Epilachna virgata Muls.	Duranta plumieri		Serious injury
Thalassa glauca (Muls.)	Erythrina rubrinervia		January
San Pedro	Persea americana		April

Insect and locality	C o l l e c t e d o n	Date and notes
ELATERIDAE Moncrepidius aversus Lec. San Pedro	Persea americana	May
ENDOMYCHIDAE Bystus hemisphaericus (Gerst.) Waldeck	Theobroma cacao	July
EROTYLIDAE Coccimorphus dichrous Lac. Pejivalle Waldeck	Elaeis guineensis Phaseolus vulgaris	February July
Cypherotylus elevatus (F.)	Chayota edulis Citrus sinensis	July August
Hapalips fuscus Reitt. Waldeck	Theobroma cacao	July
Homoeotelus jansoni Crotch San Pedro	Coffea arabica	November
LAMPYRIDAE Aspidosoma aegrotum Gorb. San Pedro	Citrus sinensis Pyrus communis	August December
Aspidosoma laterale (F.) Juan Vinas	Coffea arabica	August
NITIDULIDAE Conotelus mexicanus Murr. Paso Ancho San Pedro	Chrysanthemum maximum Coreopsis lanceolata Cucurbita pepo	August January March
	Rosa sp.	In flowers

Insect and locality	C o l l e c t e d o n	Date and notes
Conotelus stenoides Murr. San Pedro San Rafael	Ageratum conyzoides Chrysanthemum sp. Citrus limonia	January to March July, December, in flowers
SCARABAEIDAE		
Canthon viridis (Beauv.) Waldeck	Theobroma cacao	April
Cyclocephala maffa Burn. San Pedro	Caladium bicolor Xanthosoma hekeborii- folium	June Adults eat July flowers
Gymnetis liturata (Oliv.) Juan Vinas	Inga paterno	August
Macroductylus lineatus Chevr. San Jose	Citrus nobilis Citrus sinensis	Serious injury to flowers
Macroductylus suavis Bates	Carysanthemum maximum Rosa sp.	
Macroductylus sylphis Bates	Ageratum conyzoides Chrysanthemum maximum	Citrus sinensis
Pachystethus micans (Burn.)	Citrus limonia	July
Pachystethus nitidula (Blanch.) El Pisote San Isidro de Coronado San Pedro San Rafael	Chrysanthemum maximum Fragaria chiloensis Pennisetum purpureum Zantedeschia aethiopi- ica	December May October September
Strigoderma rutelina Bates San Pedro	Beta vulgaris crassa Persea americana	January Rosa sp.

Insect and locality	C o l l e c t e d o n	Date and notes
STAPHYLINIDAE Philonthus feralis Erichs.	Chayota edulis	Phaseolus vulgaris October
TENEBRIONIDAE Lobometopon guatemalensis (Champ.) Paso Ancho	Ageratum conyzoides Amygdalus davidiana Annona cherimola Annona reticulata Asparagus officinalis Averrhoa carambola Boehmeria nivea Casimiroa edulis Crotalaria striata Cucurbita pepo Dianthus caryophyllus Dillenia indica Eriobotrya japonica Ficus carica	Ficus religiosa Gliricidia maculata Impatiens balsamina Lippia berlandieri Panicum barbinode Persea pittieri Raphanus sativus Saccharum officinarum Schinus molle Solanum tuberosum Triumfetta josefina Tropaeolum majus Zea mays October to March eat July pollen and fungi
Schoenicus panamensis Champ.	Annona cherimola Asparagus officinalis Hamelia erecta Mangifera indica	Prunus salicina Pyrus communis Vicia faba January February May December
Strongylium permodicum Maklin Waldeck	Theobroma cacao	April
RHYNCHOPHORA Anypotactus exilis Boh.	Phaseolus vulgaris	November
Attelabus conicollis Sharp Paso Ancho	Psidium guajava	December

Insect and locality	C o l l e c t e d o n	Date and notes
Attelabus corvinus Gyll. Waldeck	Spondias mombin	August
Baris aerea (Boh.) San Pedro	Chrysanthemum sp.	January
Cleistolophus similis (Chevr.) San Rafael	Boehmeria nivea Chrysophyllum cainito Erythrina rubrinervia	February June July, August
Conotrachelus fulvescens Champ. San Pedro	Canarium odoratum Persea americana	January February, October
Conotrachelus perseae Barber San Pedro	Persea americana	February, August, October, December
Conotrachelus signatus Kirsch. San Pedro	Persea americana	May
Copturus perseae Gunth. San Pedro	Persea americana	February March October
Eurhinus festivus (F.)	Citharexylum caudatum	
Exophthalmus jekelianus (White) Juan Vinas Santiago Siquirres Turrialba Waldeck	Citrus limonia Citrus paradisi Citrus sinensis Coffea arabica Cupressus benthami Dahlia rosea	July August August
Exophthalmus scalptus Champ. Guadalupe Tres Rios	Coffea arabica Castanea sativa	August September

Insect and locality	Collected on	Date and notes
<i>Exophthalmus sulcicrus</i> Champ. Liberia	<i>Citrus sinensis</i> <i>Solanum</i> sp.	July
<i>Geræus lentiginosus</i> (Boh.)	<i>Citrus medica</i> <i>Cyperus caracasanus</i> <i>Delinia rosea</i> <i>Daucus carota</i> <i>Dianthus caryophyllus</i>	October to March
<i>Geræus lineellus</i> (Lec.) San Pedro	<i>Impatiens balsamina</i>	October
<i>Geræus senilis</i> (Gyll.) Paso Ancho San Pedro Santiago	<i>Zea mays</i>	June Serious injury July to corn August
<i>Heilipus trifasciatus</i> F. Sixaola	<i>Persea americana</i>	July Reared in seed Serious injury
<i>Metamasius sericeus</i> (Oliv.) San Lazaro San Pedro	<i>Acrocomia vinifera</i> <i>Musa textilis</i>	March September
<i>Pantomorus femoratus</i> Sharp. Alajuela	<i>Zea mays</i>	October
<i>Phyrdenus divergens</i> (Germ.) San Pedro	<i>Lycopersicum esculentum</i>	June
<i>Rhinospatha albomarginata</i> Chev. San Jose San Pedro	<i>Panicum barbinode</i> <i>Saccharum officinarum</i>	July August October

Insect and locality	C o l l e c t e d o n	Date and notes
<i>Rhodobaenus stigmaticus</i> (Fahraeus) Liberia	Chayota edulis Saccharum officinarum	July
<i>Rhodobaenus tridecempunctatus</i> graphicus Champ. Rio Grande	Gramineae (grass)	February
<i>Steirarrhinus nebulosus</i> Champ.	Chayota edulis Passiflora edulis Randia mitis Zinnia elegans	May July, September

D I P T E R A

<i>Anastrepha serpentina</i> (Wied).	Lucuma mammosa	Chrysophyllum cainito	August	Larvae destroy the fruit
<i>Camptoprosopella xanthoptera</i> Hendel San Pedro	Phaseolus vulgaris		October November	
<i>Carpolonchaca pendula</i> Bezzi Paraiso Paso Ancho San Pedro	Manihot esculenta		May August to tips by September December	Serious injury to larvae
<i>Chrysops variegata</i> Deg. Pejivalle	Horses		February	
<i>Dermatobia hominis</i> (L.) Pejivalle San Pedro Sixola	Man Cattle		January June	

Insect and locality	C o l l e c t e d o n	Date and notes
<i>Dilophus melanarius</i> V. d. Wulp Paraiso San Jose San Pedro San Rafael	<i>Casimiroa edulis</i> <i>Chrysanthemum maximum</i> <i>Cupressus benthami</i> <i>Mangifera indica</i> <i>Persea americana</i>	January February June October December
<i>Plecia aterrima</i> Bell Sanatorio Duran	<i>Solanum tuberosum</i>	September
<i>Rhynchosciara brevicornis</i> Guer. San Rafael	<i>Asperagus officinalis</i> <i>Averrhoa carambola</i> <i>Casimiroa edulis</i> <i>Casuarina equisetifolia</i> <i>Hibiscus rosa-sinensis</i>	January February August
<i>Richardia podagrica</i> (F.) San Pedro Waldeck	<i>Canarium odoratum</i> <i>Chrysanthemum maximum</i> <i>Tabernaemontana big-noniiflora</i> <i>Theobroma cacao</i>	July September November December
<i>Richardia telescopica</i> Gerst. Waldeck	<i>Theobroma cacao</i>	July
<i>Tetraeauresta obscuriventris</i> Loew	<i>Croton gossypifolium</i> <i>Eugenia uniflora</i> <i>Ligustrum japonicum</i>	April August

H O M O P T E R A

Insect and locality	C o l l e c t e d o n	Date and notes
ALEYRODIDAE		
Aleurocantus woglumi Ashby San Jose Tres Rios	Citrus sinensis Mangifera indica Persea americana	Adults feed only on tender leaves of avocado.
Aleuroplatus oculireformis Quaint and Baker San Pedro	Passiflora ligularis	December
Aleurothrixus howardi (Quaint.) Santo Domingo de Heredia Tres Rios	Citrus medica Citrus nobilis Fortunella japonica	October November January
APHIDIDAE		
Aphis nerii Boyer San Pedro	Asclepias curassavica Hibiscus rosa-sinensis	January, March, May, September
Cerataphis lataniae (Boisd.) San Pedro	Roystonea regia	December
Macrosiphum rosae (L.) Paso Ancho San Pedro Sarchi	Rosa sp.	December, February May
Rhopalosiphum pseudobrassicae (Davis) Guadalupe	Brassica oleracea capitata Brassica pekinensis	February March
	Raphanus sativus	

Insect and locality	C o l l e c t e d o n		Date and notes
Toxoptera surintinae Boyer Tres Rios	Camellia japonica Citrus aurantifolia Citrus medica	Citrus paradisi Fortunella margarita	
CERCOPIIDAE			
Cephus siccifolius (Walk.) San Antonio de Belen	Bidens pilosa Citrus sinensis	Gliricidia maculata	June
Clastoptera funesta Stal Florida Paso Ancho Waldeck	Musa sapientum Tabernaemontana coronaria Vernonia brachiata		April July August
Clastoptera obtusa (Say) Santa Ana	Guazuma ulmifolia		April
Epicrion championi Fowl.	Cestrum macrophyllum Ficus carica		January September
Tomaspis bicincta (Say) San Pedro	Chayote edulis Cucurbita pepo Paspalum notatum Zea mays		July October November
Tomaspis inca (Guer.) San Pedro	Zea mays		July
Tomaspis postica (Walk.) Juan Vinas Pejivalle San Pedro	Chrysanthemum maximum Malus sylvestris Panicum barbinode Panicum maximum	Phaseolus vulgaris Tropaeolum majus Zea mays	June July August

Insect and locality	Collected on	Date and notes
<i>Tomaspis similans</i> (Walk.) El Pisote	Gramineae (grass)	September
CICADELLIDAE		
<i>Aceratagallia sordida</i> Oman San Pedro	<i>Ipomoea batatas</i>	April
<i>Agallia ingens</i> Oman San Pedro	<i>Chayota edulis</i>	August
<i>Agallia lingula</i> Van D. Paso Ancho San Pedro	<i>Capriola dactylon</i> <i>Coreopsis lanceolata</i> <i>Dahlia rosea</i>	December, January, February, April, August
<i>Agallia modesta</i> O. & B.* Juan Vinas Paso Ancho San Pedro San Rafael Sarchi	<i>Acnistus arborescens</i> <i>Capriola dactylon</i> <i>Chenopodium ambrosioides</i> <i>Clerodendron fragrans</i> <i>Coreopsis lanceolata</i> <i>Dahlia rosea</i>	Throughout year
<i>Agallia novella tropicalis</i> Van D. Paraiso San Jose	<i>Acnistus arborescens</i> <i>Camellia japonica</i> <i>Chenopodium ambrosioides</i> <i>Grevillea robusta</i> <i>Hibiscus rosa-sinensis</i> <i>Ipomoea batatas</i> <i>Lippia berlandieri</i> <i>Lycopersicum esculentum</i>	Throughout year
	<i>Pelargonium graveolens</i> <i>Pelargonium zonale</i> <i>Terminalia catappa</i> <i>Trifolium fragiferum</i> <i>Vernonia brachiata</i> <i>Vicia faba</i> <i>Vinca minor</i> <i>Viola odorata</i>	

* This species was incorrectly listed as *Aligia modesta* O. & B. in the Insect Pest Survey Bulletin, supplement to Vol. 15, no. 4, p. 188, June 1935.

Insect and locality	C o l l e c t e d o n	Date and notes
Agallia repleta Van D. Waldeck	Theobroma cacao	April
Agallus bisinuatus DeLong Sarchi	Capriola dactylon	January
Aulacizes panamensis Fowl. Juan Vinas	Anacardium rhinocarpus Cornutia cymosa Croton gossypifolium	October- December
Carneiocephala sagittifera Uhl. La Ceja Juan Vinas Paso Ancho San Rafael Santiago Sarchi	Dahlia rosea Fragaria chiloensis Viola tricolor	May August
Cicadella anita Fowl. Waldeck	Coix lacryma-jobi	April July
Cicadella areolata Sign. Alajuela Paso Ancho Paraiso San Jose Santiago Tres Rios	Acnistus arborescens Anacardium occidentale Agapanthus umbellatus Casimiroa edulis Cedrela montana mexicana Cestrum macrophyllum Citrus sinensis Cymbopogon citratus Dahlia rosea	Throughout year
	Ficus carica Fortunella japonica Grevillea robusta Mangifera indica Panicum barbinode Persea americana Phaseolus lunatus Poinsettia pulcherrima Vernonia bracteata	

Insect and locality	C o l l e c t e d o n	Date and notes
Cicadella coeruleovittata Sign.	Ageratum conyzoides	Eugenia uniflora
El Pisote	Beta vulgaris crassa	Hedychium coronarium
Paso Ancho	Bidens pilosa	Fragaria chiloensis
Waldeck	Brassica japonica	Hibiscus rosa-sinensis
	Brassica pekinensis	Ipomoea batatas
	Byrsonima crassifolia	Ipomoea tillicaea
	Caladium bicolor	Jacobinia coccinea
	Coix lacryma-jobi	Lactuca sativa
	Coleus blumei	Polygonum acre
	Colocasia esculenta	Raphanus sativus
	Coreopsis lanceolata	Solanum tuberosum
Cicadella costaricensis Dist.	Vernonia brochata	September
El Pisote		
Cicadella lativittata Fowl.	Fragaria chiloensis	August
Santiago		
Cicadella lutea Sign.	Ficus religiosa	
	Grevillea robusta	
		Psidium guajava
		Terminalia catappa
Cicadella miniaticeps Fowl.	Acnistus arborescens	Throughout year
Alajuela	Ageratum conyzoides	Coffea arabica
Juan Vinas	Allamanda cathartica	Coix lacryma-jobi
La Caja	Baccharis nervosa	Crotalaria spectabilis
Paso Ancho	Calyptanthus costaricensis	Cynadenum sp.
Pejivalle	Canna indica	Datura candida
San Rafael	Capriola dactylon	Daucus carota
Waldeck	Capsicum annuum	Dillenia indica
	Chayota edulis	Dovyalis hebecarpa
	Chenopodium ambrosioides	Eugenia malaccensis
		Galinzoga hispida
		Jacaranda ovalifolia

Insect and locality	Collected on	Date and notes
Cicadella miniaticeps Fowl. - Cont'd.	<p>Panicum barbinode Panicum maximum Phaseolus vulgaris Phytolacca octandra Pisum sativum Saccharum officinarum Schinus molle Solanum tuberosum</p>	Throughout year
Cicadella mollicella Fowl. Sarchi	Capriola dactylon Panicum barbinode	April
Cicadella occatoria (Say) San Rafael Sarchi Tres Rios	<p>Bauvardia humboldtii Beta vulgaris crassa Brassica pekinensis Chenopodium ambrosioides Citrus sinensis Codium variegatum Crotalaria fulva Croton gossypifolium Cucurbita ficifolia Daucus carota Dombeya wallichi Eriobotrya japonica</p>	<p>Hibiscus rosa-sinensis Holcus sorghum Indigofera suffruticosa Ipomoea tiliacea Lagenaria leucantha Musa sapientum Phaseolus lunatus Phytolacca octandra Piper auritum Poinsettia pulcherrima Radicula armoracea Sapum acuparium Terminalia catappa Thespesia populnea Trifolium fragiferum</p>
	<p>Eucalyptus trachypholia Fragaria chiloensis Gossypium barbadense Heliotropium peruvianum Hibiscus abelmoschus</p>	

Insect and locality	C o l l e c t e d o n	Date and notes
Cicadella pandolina Fowl.	Duranta plumieri Erythrina rubrinervia Hibiscus rosa-sinensis Mangifera indica Melaleuca leucadendron	Persea americana Schinus molle Sterculia diversifolia
Cicadella pulchella Guer. Juan Vinas Paraiso Pejivalle San Jose Santiago Sarchi	Ananas sativus Calea urticifolia axillaris Coffea arabica Heliotropium sp. Panicum barbinode Phaseolus vulgaris	Euphorbia sativus Tetragonia expansa Zea mays January February April August October
Cicadella reservata Fowl.	Asclepias curassavica Citrus sinensis Croton gossypifolium	Dahlia rosea Eugenia jambos August
Cicadella rufoapicata Fowl. Waldeck	Theobroma cacao	April
Cicadella satellas Fowl.	Passiflora quadrangularis Spondias cythera	Tabernaemontana bigoniaeflora August December
Cicadella sexlineata Sign. Juan Vinas San Rafael	Ageratum conyzoides Amaranthus spinosus Baccharis nervosa Beta vulgaris crassa Boehreria nivea Calyptanthus costaricensis	Chayote edulis Chenopodium ambrosioides Cobea scandens Coleus blumei Cornutia cyrosa Croton gossypifolium

Insect and locality	C o l l e c t e d o n		Date and notes
Cicadella sexlineata Sign. - Cont'd.	Cucurbita ficifolia Cucurbita pepo Daturus stramonium Daucua carota Dovyvalis hebecarpa Eugenia malaccensis Ficus carica Hamelia erecta Hibiscus abelmoschus Hibiscus rosa-sinensis Impatiens balsamina	Ipomoea tiliacea Jacobinia coccinea Lippia berlandieri Malacra radiata Morus rubra Phaseolus vulgaris Pyrus communis Raphanus sativus Spondias purpurea Terminalia catappa Zea mays	February April October November
Cicadella similis Walk. Paso Ancho San Rafael Sarchi	Artemisia absinthium Brassica japonica Byrsonima crassifolia Ceiba pentandra Cestrum aurantiacum Chayota edulis Cinnamomum camphora Coffea arabica Coix lacryma-jobi Crotalaria juncea Cupressus benthami Eschscholtzia californica Eugenia malaccensis Fragaria chiloensis Galinzoga hispida Gardenia florida Grevillea robusta Holcus sorghum Ipomoea batatas	Ipomoea tiliacea Iris laevigata Lactuca sativa Lippia berlandieri Morus rubra Phaseolus lunatus Psidium molle Rheedia sp. Saccharum officinarum Saccharum spontaneum Solanum tuberosum Solanum wendlandi Trifolium fragiferum Verbena sp. Vicia faba Viola odorata	

Insect and locality	C o l l e c t e d o n	Date and notes
Cicadella testudinaria Fowl.	Asclepias curassavica Bauhinia monandra Calliandra grandiflora Calyptranthes costaricensis Citrus limonia Codiaeum variegatum Eugenia jambos Eugenia uniflora	Ficus carica Gliricidia maculata Hibiscus rosa-sinensis Jasminum sambac Lucuma mammosa Malus sylvestris Tabebuia guayacan Thespesia populnea Vernonia brachiata Vinca rosea
Cicadula maidis DeLong and Wolcott Paso Ancho	Chayota edulis	
Deltocephalus flavicosta Stal	Capriola dactylon Hemerocallis sp.	January October
Deltocephalus spinosus San Pedro Sarchi	Capriola dactylon	January February
Draeculacephala lenticula Ball Juan Vinas Rio Grande San Pedro Waldeck	Canna indica Capriola dactylon Coix lacryma-jobi Grevillea robusta Panicum barbinode	January to April August December
Draeculacephala soluta Gibs. San Pedro	Capriola dactylon Ipomoea batatas	January
	Saccharum officinarum	
	Lactuca sativa	

Insect and locality	C o l l e c t e d o n	Date and notes
Empoasca perelegans Oman Paraiso Paso Ancho San Pedro	Annona cherimola Annona reticulata	January March August to December
Empoasca phaseola Oman San Pedro	Phaseolus lunatus Phaseolus vulgaris	April October to February
Exitianus picatus Gibs. Paso Ancho San Pedro Sarchi	Capriola dactylon Paspalum notatum	October December - February
Graphocephala coccinea (Forst.) Juan Vinas Paso Ancho San Jose Sarchi	Acnistus arborescens Allamanda cathartica Boehmeria nivea Bombax ellipticum Canarium odoratum Carissa grandiflora Cinnamomum camphora Citrus aurantium Citrus limonia Citrus paradisi Citrus sp. (toronjo) Clerodendron fragrans Coix lacryma-jobi Conocarpus velutina Cupressus benthami Cytisus fragrans Dahlia rosea Datura candida	Duranta plumieri Ficus carica Fortunella japonica Fortunella margarita Grevillea robusta Impatiens balsamina Jacobinia coccinea Jatropha aconitifolia Ligustrum japonicum Melaleuca leucadendron Pelargonium zonale Persea pittieri Plumeria rubra Spondias cytherca Sterculia diversifolia Tabebuia pentaphylla Terminalia catappa Thunbergia erecta

Insect and locality	Collected on	Date and notes
Graphocephala sanguinolenta Coqueb. Waldeck	Musa sapientum Theobroma cacao	April July
Graphocephala rufimargo Walk. San Rafael Santiago Sarchi	Abutilon sp. Capriola dactylon Zea mays	January February August
Graphocephala limbaticollis Stal Paraiso Paso Ancho San Jose Tres Rios	Acnistus arborescens Asclepias curassavica Canangium odoratum Citrus limonia Colocasia esculenta Croton gossypifolium Dombeya wallichii Erythrina rubrinervia	October
Graphocephala versuta (Say)	Citrus aurantium Eucalyptus trachypholia Eugenia jambos Fortunella japonica Hibiscus rosa-sinensis Hymenaea courbaril	Euphorbia noffmaniana Hibiscus rosa-sinensis Inga laurina Jatropha aconitifolia Malus sylvestris Piper auritum Sapium acuparium Spondias cytherea Inga edulis Inga laurina Ligustrum japonicum Sterculia diversifolia Verbesina turbacensis
Gypona praetorita Fowl. Desamparados Waldeck	Elaeis guineensis Galinzoga hispida	July October
Gypona puncticollis Spangb. San Pedro	Panicum barbinode	April

Insect and locality	C o l l e c t e d o n	Date and notes
Gypona vimula Stal San Pedro	Aenistus arborescens Panicum barbinode	August
Gypona signoreti Stal El Pisote San Pedro	Hamelia erecta	November January
Gypona vulnerata Walk. Tres Rios	Aenistus arborescens Ageratum conyzoides Albizia lophantha Alnus acuminata Annona muricata Baccharis nervosa Bixa orellana Byrsionina crassifolia Calliandra grandiflora Callistemon lanceo- latus Canarium odoratum Castanea sativa Cestrum lanatum Chayota edulis Cinnamomum camphora Citrus aurantifolia Citrus medica Croton gossypifolium	Duranta plumieri Eriobotrya japonica Eucalyptus trachypho- ia Ficus religiosa Fortunella japonica Grevillea robusta Malus sylvestris Melaleuca leucaden- dron Pelargonium zonale Phaseolus lunatus Prunus salicina Pyrus communis Rosa sp. Solanum torvum Spondias cytherea
Kolla fasciata (Walk.)	Ageratum conyzoides Panicum barbinode Thespesia populnea	

Insect and locality	C o l l e c t e d o n	Date and notes
Kolla geometrica (Sign.)	Cleome spinosa Croton gossypifolium Grevillea robusta Hedychium coronarium Musa sapientum	Sapium sp. Solanum aculeatissima Solanum tuberosum Tabebuia guayacan
Oncometopia undata (F.)	Citrus aurantium Citrus limonia Cocos nucifera Dahlia rosea Eugenia malaccensis Heliantus annuus	Hibiscus sabdariffa Lantana trifolia Passiflora edulis Pelargonium zonale Rosa sp.
Osbornellus mexicanus Osb. Paso Ancho San Pedro	Annona cherimola Capriola dactylon Chayote edulis Coreopsis lanceolata Cosmos sulphureus Gomphrena globosa Ipomoea batatas Ipomoea tiliacea	Parkinsonia aculeata Pelargonium zonale Persea americana Phaseolus lunatus Phaseolus vulgaris Tournefortia foetidisima Vinca rosea
Phera obtusifrons Fowl. San Pedro	Calistemon lanceolatus Carissa grandiflora Coix lacryma-jobi	Hibiscus rosa-sinensis March Saccharum officinarum Zea mays
Platymetopius frontalis Van D. Paraíso Paso Ancho San Jose San Pedro Waldeck	Acnistus arborescens Amaranthus paniculatus cruentus Calyptranthes costaricensis Capsicum annuum	Cinnamomum camphora Cissus sicyoides Citrus sinensis Clorodendron fragrans Crotalaria spectabilis

Insect and locality	C o l l e c t e d o n	Date and notes
Platymetopius frontalis Van D -- Cont'd.	Cyclanthera pedata Dahlia rosea Datura candida Dombeya wallichii Ficus carica Galinzoza hispida Gomphrena globosa Grevillea robusta Guarea caoba Hibiscus rosa-sinensis Impatiens balsamina Ipomoea tiliacea Jacaranda ovalifolia Lagenaria leucantha Malacra radiata Persea americana Phaseolus vulgaris	Poinsettia pulcherrima Raphanus sativus Sambucus mexicana Solanum tuberosum Spondias cytherea Tabernaemontana coronaria Tetragonia expansa Thespesia populnea Verbena sp. Vernonia brachiata Vicia faba Viola odorata Vitis tiliaefolia Zea mays
Protalebra decrata San Pedro	Vernonia brachiata	March, April, October to January
Spanbergiella mexicana Bak. San Pedro	Panicum barbinode	April
Stirellus bicolor (Van D.) Barba El Pisote San Pedro	Chayota edulis Pennisetum clandestinum	October November
Thamnotettix conatus (Ball) Juan Vinas Paso Ancho San Pedro Sarchi	Capriola dactylon Paspalum notatum	August October December to February

Insect and locality	C o l l e c t e d o n	Date and notes
Thamnotettix fasciaticollis (Stal) ? San Pedro San Rafael	Annona squamosa Brassica japonica Caesalpinia pulcher- rima Capriola dactylon Casimiroa edulis Cedrela montana mexi- cana Cestrum lanatum Cestrum macrophyllum Citharexylum caudatum Citrus aurantium Citrus limonia Citrus nobilis Crotalaria spectabilis	August to March May
Xestocephalus tessellatus Van D. San Pedro San Rafael	Cucurbita pepo Dombeya wallichi Ficus religiosa Hibiscus rosa-sinen- sis Ligustrum japonicum Lippia berlandieri Phytolacca octandra Pisum sativum Saccharum officinarum Solanum tuberosum Tetragonia expansa Vicia faba	February April
COCCIDAE Asterolecanium bambusae Boisd. San Isidro del General	Panicum barbinode Tripsacum latifolia	August
Aulacaspis pentagona (Targ.)	Bambusa sp. Amygdalus davidiana Schinus molle	Chilocorus cacti L. is predacious on this scale.

Insect and locality	Collected on	Date and notes
Ceroplastes floridensis Comst. Alajuela San Pedro San Rafael	Beaumontia grandiflora Casimiroa edulis Citrus aurantium Citrus limonia Citrus nobilis Cydonia oblonga	Ficus religiosa Guarea caoba Nephrolepis sp. Persea americana Plumeria rubra
Chrysomphalus dictyospermi (Morg.)	Garcinia tinctoria	February August
Coccus acuminatus (Sign.) Paso Ancho Tres Rios	Gardenia florida Ixora chinensis	August September December
Coccus hesperidum (L.) San Miguel del Sur de Santo Domingo de Heredia	Achyranthes aspera Carissa grandiflora Chamaedora bifurcata Citrus mitis Citrus nobilis Diospyros virginiana	April August October December to February
Coccus viridis (Green) San Isidro del General	Citrus sinensis	August
Eriococcus araucariae Mask. San Pedro Tres Rios	Araucaria excelsa	May September
Hemichionaspis aspidistrae (Sign.) Iimon San Pedro	Nephrolepis sp.	March May Serious injury to ferns

Insect and locality	C o l l e c t e d o n	Date and notes
Icerya montserratensis Riley and Howard San Pedro	Cyphomandra betacea	November
Ischnaspis longirostris (Sign.) Tres Rios	Chrysalidocarpus lutescens	September
Lepidosaphes beckii (Newm.)	Citrus aurantium Citrus limonia	Almost completely controlled by fungus <u>Sphaero-</u> <u>stilbe coccophila.</u>
Orthezia insignis Dougl. San Rafael	Ruta graveolens Solanum pseudocapsicum	January February, June
Pseudischnaspis bowreyi (Ckll.)	Hicoria pecan Prunus salicina	Thunbergia alata Viola odorata
Pseudococcus citri (Risso)	Citrus trifoliata Fortunella japonica Persea americana	Sterculia diversifolia
Pseudococcus nipae (Mask.)	Anacardium occidentale	January March April
Pseudococcus virgatus (Ckll.) San Pedro	Althaea rosea	October
Pulvinaria psidii Mask. San Rafael	Garcinia tinctoria Phyllanthus angustifolia	December
Rhizococcus coffeae Laing Sabanilla	Coffea arabica	November Serious damage

Insect and locality	C o l l e c t e d o n		Date and notes
Saissetia hemisphaerica (Targ.) San Francisco San Rafael Santa Ana	Annona cherimola Asparagus plumosus Bauhinia monandra Beaumontia grandiflora Callistemon lanceolatus Carissa grandiflora Cestrum aurantiacum Chrysophyllum cainito Citrus nobilis Codiaeum variegatum Congee velutina Cydonia oblonga Erythrina rubrinervia Eugenia jambos Eugenia malaccensis Ficus carica	Fortunella japonica Garcinia tinctoria Gonolobus edulis Guazuma ulmifolia Ixora chinensis Lagerstroemia indica Lagerstroemia speciosa Mangifera indica Piper auritum Phyllanthus angustifolia Plumeria rubra Spondias cytherea Sterculia diversifolia Trichilia havensis	
Saissetia oleas (Bern.)	Bauhinia monandra Chrysophyllum cainito	Citrus nobilis Thunbergia erecta	November
FULGORIDAE			
Acanalonia virescens (Stal.)	Chayota edulis Citrus sinensis Piper auritum	Tournefortia foetida Vernonia brachiata Verbesina turbacensis	March, April, October January, October
Bothriocera tinealis (Klug)			
Colgorma proxima (Fowl.) Paso Ancho	Croton gossypifolium		August

Insect and locality	C o l l e c t e d o n	Date and notes
Colpoptera sp. San Rafael Sarchi Waldeck	<p>Acnistus arborescens Ageratum conyzoides Begonia sp. Blakea gracilis Buddleia davidi Caladium bicolor Cattleya skinneri Cestrum aurantiacum Cestrum nocturnum Chenopodium ambrosioides Citrus aurantifolia Citrus sinensis Coleus blumei Congea velutina Cucurbita pepo Cupressus benthami Datura candida Datura stramonium Dieffenbachia sp. Eriobotrya japonica Eugenia uniflora Ficus carica Fragaria chiloensis Theobroma cacao</p>	<p>Hamelia erecta Hibiscus esculentus Impatiens sultani Ipomoea tiliacea Jacobinia coccinea Lycopersicum esculentum Myosotis sylvatica Passiflora quadrangularis Persea americana Petunia hybrida Poinsettia pulcherrima Raphanus sativus Ricinus communis Salvia splendens Solanum muricatum Solanum nigrum Solanum seaforthianum Theobroma cacao Tropaeolum majus Zea mays</p>
Colpoptera sinuata Burm. Waldeck	Theobroma cacao	July
Copicerus irroratus Swartz San Pedro	<p>Acnistus arborescens Ageratum conyzoides Croton gossypifolium</p>	<p>Hibiscus rosa-sinensis March Rumex crispus August Tournefortia foetida September</p>

Insect and locality	C o l l e c t e d o n	Date and notes
<i>Cotyleceps maculata</i> Fowl. Waldeck	Theobroma cacao	April
<i>Delphacodes nigra</i> Crawford. San Pedro	Gramineae (grass)	February
<i>Delphacodes nigrifacies</i> Muir Juan Vinas San Pedro	Gramineae (grass)	August October
<i>Delphacodes propinqua</i> Fieb. San Pedro Sarchi	<i>Capriola dactylon</i> <i>Galinzoga hispida</i>	January February
<i>Liburnia teapae</i> Fowl. San Pedro	<i>Coleus blumei</i> Gramineae (grass)	February
<i>Dictyophara herbida</i> (Walk.) Waldeck	<i>Elaeis guineensis</i> Theobroma cacao	July
<i>Dictyophara obtusifrons</i> (Walk.) Rio Grande	Gramineae	February
<i>Epibidius godmani</i> Fowl. Waldeck	Theobroma cacao	July
<i>Flatoides humeralis</i> Walk. Guadalupe San Pedro	<i>Amygdalus persica</i> <i>Citrus limonia</i> <i>Croton gossypifolium</i>	February April December
<i>Gaetulia plenipennis</i> (Walk.) Waldeck	Theobroma cacao	July

Insect and locality	C o l l e c t e d o n	Date and notes
<i>Cecileus addendus</i> Fowl. Juan Vinas	<i>Coffea arabica</i>	August
<i>Peregrinus maidis</i> (Ashm.) San Pedro	<i>Zea mays</i>	August
<i>Sogata furcifera</i> Horv. San Pedro	<i>Phaseolus vulgaris</i>	October
MEMBRACIDAE		
<i>Aconophora nitida</i> Fowl. Juan Vinas	<i>Coffea arabica</i>	May August
<i>Aconophora pallescens</i> Stal La Caja Pejivalle San Rafael	<i>Acnistus arborescens</i> <i>Amygdalus persica</i> <i>Boehmeria nivea</i> <i>Calyptranthes costaricensis</i> <i>Canarium odoratum</i> <i>Cestrum macrophyllum</i> <i>Dovyalis hebecarpa</i> <i>Eugenia uniflora</i>	<i>Ficus religiosa</i> <i>Fortunella japonica</i> <i>Grevillea robusta</i> <i>Hicoria pecan</i> <i>Lagerstroemia indica</i> <i>Parkinsonia aculeata</i> <i>Prunus armeniaca</i> <i>Pyrus communis</i>
<i>Acutalis fusconervosa</i> Fairm. Paso Ancho Turrialba	<i>Dahlia rosea</i> <i>Musa sapientum</i>	July August
<i>Aethalion reticulatum</i> (L.)	<i>Bauhinia purpurea</i> <i>Fortunella japonica</i> <i>Grevillea robusta</i> <i>Jacaranda ovalifolia</i>	March August October

Insect and locality	C o l l e c t e d o n	Date and notes
Alchisme grossa (Fairm.) San Pedro	Coffea arabica Inga tonduzii	July October
Anastris obtegens (F.) Waldeck	Theobroma cacao	July
Antianthe expansa (Germ.) Paraíso San Rafael	Cestrum nocturnum Ipomoea batatas Verbesina turbacensis	
Bolbonota inaequalis (Fairm.) Juan Vinas Paraíso Santiago Siquirres Turrialba Waldeck	Acalypha hispida Alnus acuminata Amygdalus persica Anacardium rhinocarpus Annona muricata Bauhinia purpurea Byrsonima crassifolia Casimiroa edulis Cassia sophora Cestrum macrophyllum Cestrum nocturnum Citrus aurantifolia Citrus nobilis	Conostegia lanceolata Garcinia tinctoria Grevillea robusta Hibiscus rosa-sinensis Inga edulis Lagerstroemia speciosa Piper auritum Rheedia sp. Spondias cytherea Theobroma cacao Thespesia populnea Verbesina turbacensis Vernonia brachiata
Bolbonota insignis Fowl. Alajuela La Caja Paso Ancho San Francisco de Dos Rios San Jose	Acalypha hispida Acalypha wilkesiana Aciistus arborecens Anacardium occidentale Annona cherimola Annona muricata	December

Insect and locality	C o l l e c t e d o n	Date and notes
Bolbonota insignis Fowl.- Cont'd.	Codium variegatum Cynademuim sp. Dahlia rosea Dovyalis hebecarpa Lagerstroemia speciosa Spondias cytherea	Spondias purpurea Tamarindus indica Thespesia populnea Vernonia brachiata Zea mays
Campylocentrus hamifer (Fairm.) Guadalupe	Coffea arabica Gonolobus edulis	Petiveria alliacea February, June, October, November
Campylocentrus pusillus (Fairm.) El Pisote San Pedro Tres Rios	Cucurbita ficifolia Cucurbita pepo Gramineae (grass)	Ipomoea tiliacea Zea mays January July September
Ceresa testacea Fairm. Paraíso Paso Ancho San Pedro San Rafael	Amygdalus persica Celosia cristata Cupressus benthami Dahlia rosca Erythrina rubrinervia	Musa sapientum Parkinsonia aculeata February April July to September
Ceresa vitulus (F.) San Pedro	Chayota edulis Ipomoea tiliacea	Ipomoea purga February March, October
Ceresa vitulus minor Fowl. Juan Vinas Waldeck	Elaeis guineensis Erythrina glauca	July
Cyphonia clavata (F.) Waldeck	Theobroma cacao	July
Enchenopa binotata (Say) San Pedro	Amygdalus persica Annona squamosa Bauhinia purpurea	Bauhinia violacea Cestrum macrophyllum Citrus nobilis X C. paradisi January February, April May, August, September, November, December

Insect and locality	Collected on	Date and notes
Enchenopa binotata (Say) - Cont'd.	Cydonia oblonga Diphyse robinoides Erythrina rubrinervia Eugenia uniflora	Hymenaea courbaril Malus sylvestris Melilotus alba Parkinsonia aculeata
Enchenopa lanceolata (Stoll) San Rafael	Annona muricata Conostegia lanceolata	December
Enchophyllum dubium Fowl. San Pedro	Persea americana	May
Entylia sinuata (F.) Paraíso San Rafael	Acnistus arborescens Ageratum conyzoides Beta vulgaris crassa Capriola dactylon Cedrela montana mexicana Cestrum macrophyllum Chayota edulis Clerodendron fragrans Datura candida Daucus carota Eriobotrya japonica	January August
Erechtia sallaei (Fowl.) Alajuela	Byrsonima crassifolia Canarium odoratum	Persea americana
Horiola arcuata (F.) Juan Vinas Waldeck	Coffea arabica Theobroma cacao	April May
Horiola composita Walk. Waldeck	Theobroma cacao	July

Insect and locality	Collected on	Date and notes
<i>Horiola picta</i> (Coquet.) Santiago Turrialba	<i>Cassia spectabilis</i> <i>Citrus limonia</i> <i>Eugenia jambos</i>	July August
<i>Membracis mexicana</i> Guer. Santa Ana Siquirres	<i>Acalypha wilkesiana</i> <i>Alnus acuminata</i> <i>Bauhinia nonandra</i> <i>Bauhinia violacea</i> <i>Byrsonima crassifolia</i> <i>Cestrum macrophyllum</i> <i>Chrysophyllum cainito</i> <i>Codiaeum variegatum</i> <i>Crotalaria striata</i> <i>Cupressus benthami</i> <i>Enterolobium cyclocarpum</i>	Eucalyptus glauca Causes considerable damage by oviposition Fortunella japonica Fortunella margarita Grevillea robusta Melaleuca leucadendron Parkinsonia aculeata Phoradendron flavescens Rosa sp. Spondias mombin Trena micrantha Vitis tiliaefolia
<i>Micrutalis ephippium</i> (Burm.) San Pedro	<i>Anacardium paniculatus</i> <i>Anacardium spinosus</i>	January March to May
<i>Micrutalis lugubrina</i> (Stal.) San Pedro	<i>Cornutia cynosa</i>	March
<i>Potnia brevicornis</i> Fowl. San Pedro	<i>Xylosma</i> sp.	August, October, December
<i>Pterygia bituberculata</i> Fowl. La Caja	<i>Coffea arabica</i>	May
<i>Spongophorus ballista</i> (Germ.) Gundalupe	<i>Chayota edulis</i> <i>Coffea arabica</i> <i>Crotalaria striata</i>	January, June, July, August, December

Insect and locality	C o l l e c t e d o n	Date and notes
Acroleucus brevicollis (Stal) San Pedro	Canangium odoratum	August
Acrosternum marginatum (Beauv.) San Pedro	Zea mays	September
Alloccoris elegans McA. & M. Faso Ancho	Dahlia rosea	August
Anasa andresii (Guer.) San Jose	Chayota edulis Cucurbita ficifolia Dahlia rosea	January July
Anasa madida Dist. San Pedro	Acnistus arborescens Persea americana	February December
Anasa bellator (F.) Waldeck	Elaeis guineensis	July
Anasa scorbutica (F.) San Jose	Amygdalus persica Chayota edulis	July September
Castolus plagiaticollis Stal San Rafael Waldeck	Theobroma cacao Panicum barbinode	February April
Cebrenis modesta Dist. San Pedro	Vernonia brachiata	March
Charicosterus moestus Burm. Santa Ana	Pedilanthus tithymal- oides	April
Chlorocoris aberrans Dist. San Pedro	Citrus sinensis	March

Insect and locality	C o l l e c t e d o n	Date and notes
Collaria oleosa Dist. El Pisote San Rafael Turrialba	Ageratum conyzoides Chayota edulis Coffea arabica Coix lacryma-jobi	Pennisetum purpureum Phaseolus lunatus Saccharum officinarum Saccharum spontaneum
Corecoris fusca (Thunb.) San Jose San Pedro	Ageratum conyzoides Chayota edulis Coffea arabica	Pelargonium zonale Solanum nigrum
Corizus hyalinus (F.) San Pedro	Lactuca sativa	February
Corizus pictipes (Stal) San Pedro	Hibiscus rosa-sinensis Malacra radiata	February July
Corizus sidac F. Waldeck	Theobroma cacao	July
Cosmopepla coeruleata Montd. San Jose	Daucus carota Ipomoea sp.	January August, October
Creontiades rubrinervus (Stal) San Jose	Asparagus officinalis Chayota edulis Cupressus benthami Cucurbita pepo	August October
Cyrtocapsus caliginus (Stal) San Pedro	Ipomoea batatas Ipomoea tiliacea	January April
Debilial angustata Champ. Waldeck	Theobroma cacao	July
Dysdercus flavolimbatus Stal Waldeck	Sida rhombifolia	July

Insect and locality	C o l l e c t e d o n	Date and notes
Dysdercus mimulus Hussey San Pedro San Rafael	Chayota edulis Ipomoea batatas Myosotis sylvatica	Nephrolepis sp. February to April October
Dysdercus obliquus (H. S.) Desamparades	Acalypha wilkesiana Boehmeria nivea Datura candida Dombeya wallichii Galinzoga hispida	Hibiscus abelmoschus Impatiens balsamina Malacra radiata Malus sylvestris Morus rubra June, Important injury September, to <u>Hibiscus</u> to <u>abelmoschus</u> December
Dysdercus oncopeltus Dist. Liberia	Saccharum officinarum	February
Ecritotarsus pallidirostris Stal San Pedro	Ipomoea tiliacea	January
Edessa cornuta Burm. El Pisote San Jose Santiago	Acnistus arborescens Brassica japonica Brassica rapa Chayota edulis Citrus limonia	June July September
Edessa junix Stal San Pedro	Erythrina rubrinervia	October
Edessa nigrispina Dallas Las Juntas de Abangares	Oryza sativa	
Edessa rufomarginata (Deg.) San Lazaro	Sida rhombifolia	March

Insect and locality	C o l l e c t e d o n	Date and notes
<i>Euryophthalmus cinctus</i> (H.S.) Juan Vinas Rosario de Naranjo San Rafael	<i>Chrysanthemum maximum</i> <i>Coffea arabica</i> <i>Inga paterno</i>	February August November
<i>Euschistus bifibulus</i> (Beauv.) San Pedro Turrialba	<i>Cestrum macrophyllum</i> <i>Chayota edulis</i> <i>Hibiscus schizopetalus</i>	April to July October
<i>Euschistus crenator</i> (F.) Waldeck	<i>Theobroma cacao</i>	April
<i>Gargaphia patricia</i> (Stal) Guadalupe	<i>Coffea arabica</i> <i>Erythrina rubrinervia</i>	October
<i>Halticus bractatus</i> (Say) Guayolar	<i>Artemisia absinthium</i> <i>Asparagus plumosus</i> <i>Beta vulgaris crassa</i> <i>Bidens pilosa</i> <i>Brassica japonica</i> <i>Brassica pekinensis</i> <i>Chayota edulis</i> <i>Coreopsis lanceolata</i> <i>Cucumis melo</i>	June Very destructive August to melons October
<i>Heracus guttata</i> (Dallas) San Pedro	<i>Phaseolus vulgaris</i>	November
<i>Heza similis</i> Stal Guadalupe Waldeck	<i>Coffea arabica</i> <i>Theobroma cacao</i>	July October

Insect and locality	C o l l e c t e d o n	Date and notes
Hypselonotus atratus Dist. Juan Vinas Pejivalle San Rafael Santiago	Chrysanthemum maximum Colocasia esculenta Crotalaria striata Cupressus benthami Impatiens balsamina Inga paterno Melanthera aspera	August October
Hypselonotus loratus Bredd. Waldeck	Sida rhombifolia	July
Ischnodemus sallaci (Sign.) San Pedro Paso Ancho	Canna indica	August to December
Lampethusa anatina Dist. San Pedro	Chayota edulis	August
Leptocoris tipuloides (Deg.) San Jose	Annona cherimola	August
Leptoglossus stigma (Hbst.)	Citrus nobilis Cythomandra betacea	February to May
Leptoglossus zonatus (Dallas) Paraiso San Jose Santiago Sarchi	Asparagus officinalis Chayota edulis Citrus aurantium Cupressus benthami Datura stramonium	Helianthus annuus Malus sylvestris Poinsettia pulcherrima Vigna sesquipedalis
Ligyrocoris litigious (Stal) San Pedro	Averrhoa carambola Fragaria chiloensis	January May

Insect and locality	C o l l e c t o r	Date and notes
<i>Ligurocoris multispinus</i> Stal San Pedro	<i>Ligustrum japonicum</i> <i>Phaseolus vulgaris</i>	January October
<i>Lygaeus bistrigularis</i> Say Barba	<i>Annona squamosa</i> <i>Pennisetum claudes-</i> <i>tinum</i>	November
<i>Lygaeus reclinatus</i> Say	<i>Asclepias curassavica</i>	April
<i>Lygaeus uhleri</i> Stal San Pedro	<i>Zea mays</i>	July
<i>Lygus sallaei</i> Stal San Pedro San Rafael	<i>Annona reticulata</i> <i>Beta vulgaris crassa</i> <i>Datura suaveolens</i> <i>Galinzoga hispida</i>	December to April
<i>Mecistorhinus tripterus</i> (F.) Siquirres Waldeck	<i>Hibiscus rosa-sinensis</i> <i>Theobroma cacao</i>	July
<i>Monanthia monotropidia</i> Stal La Caja	<i>Cassia spectabilis</i>	May
<i>Mormidea notulata</i> (H. S.) Guadalupe San Pedro San Rafael	<i>Chayota edulis</i> <i>Coffea arabica</i> <i>Panicum barbinode</i> <i>Zea mays</i>	February July to October
<i>Myodocha unispinosa</i> Stal Waldeck	<i>Theobroma cacao</i>	April

Insect and locality	Collected on	Date and notes
<i>Neurocolpus mexicanus</i> Dist. San Pedro	<i>Myosotis sylvatica</i> <i>Vicia faba</i>	January
<i>Nezara viridula</i> (L.)	<i>Bixa orellana</i> <i>Chayota edulis</i> <i>Crotalaria striata</i> <i>Lippia berlandieri</i>	January March
<i>Nysius californicus</i> Stal San Pedro	<i>Tetragonia expansa</i> <i>Galinzoga hispida</i>	January May
<i>Nysius ementitus</i> Dist. San Pedro Santa Lucia	<i>Ageratum conyzoides</i> <i>Lippia berlandieri</i>	January February December
<i>Orthaea bilobata</i> (Say) Paso Ancho San Pedro	<i>Chayota edulis</i> <i>Dahlia rosea</i> <i>Zea mays</i>	June August
<i>Ortholomus jamaicensis</i> Dallas San Pedro	<i>Tetragonia expansa</i>	May
<i>Pachycoris torridus</i> (Scop.) Guadalupe	<i>Annona cherimola</i> <i>Coffea arabica</i> <i>Croton gossypifolium</i> <i>Eriobotrya japonica</i> <i>Erythrina rubrinervia</i>	February March August
<i>Padacus viduus</i> (Voll.) San Pedro San Rafael	<i>Chayota edulis</i> <i>Hibiscus rosa-sinensis</i>	February October

Insect and locality	C o l l e c t e d o n	Date and notes
Pangaenus piceatus Stal San Pedro	Casuarina equisetifolia Coffea arabica Colocasia esculenta	Fragaria chiloensis Phaseolus vulgaris
Paracalocoris annulatus Dist.	Amygdalus persica Chayota edulis Citrus limonia Diospyros virginiana	Mangifera indica Phaseolus vulgaris Poinsettia pulcherrima Zea mays
Paracalocoris jurgiosus (Stal) San Pedro	Chayota edulis	July to September
Paracalocoris molliculus Dist. San Pedro	Fortunella japonica Gerbera jamesoni Persea americana	January December
Piesma cinerea (Say) San Pedro	Amaranthus spinosus	April
Platycarenum humilis (H.S.) Waldeck	Theobroma cacao	July
Platytyellus latipennis (Stal) Grecia San Pedro	Gramineae (grass) Hibiscus rosa-sinensis	February August
Polymerus cuneatus (Dist.)	Amaranthus paniculatus cruentus Amaranthus spinosus	January March April
Proxys punctulatus (Beauv.) San Pedro	Verbesina turbacensis	March

Insect and locality	C o l l e c t e d o n	Date and notes
<i>Proxys victor</i> (F.) Waldeck	<i>Theobroma cacao</i>	April
<i>Pycnoderes atratus</i> (Dist.) San Pedro	<i>Phaseolus vulgaris</i>	October
<i>Pycnoderes incurvus</i> (Dist.) Paraiso	<i>Chayota edulis</i> <i>Chrysophyllum cainito</i>	January
<i>Repipta flavicans</i> (Amy. & Serv.) Waldeck	<i>Theobroma cacao</i>	April
<i>Repipta taurus</i> (F.) Waldeck	<i>Theobroma cacao</i>	July
<i>Sphictyrtus longirostris</i> Dist. San Pedro	<i>Costus sanguineus</i>	January
<i>Staluptus marginalis</i> Burm. San Jose San Pedro	<i>Poinsettia pulcherrima</i> <i>Vernonia brachiata</i>	February September to December
<i>Stenomacra marginella</i> (H.S.)	<i>Amygdalus davidiana</i> <i>Camellia japonica</i> <i>Canarium odoratum</i> <i>Cestrum marginella</i> <i>Chalcas exotica</i> <i>Chayota edulis</i> <i>Citharexylum caudatum</i> <i>Congea velutina</i> <i>Croton gossypifolium</i> <i>Datura candida</i> <i>Dombeya wallichii</i> <i>Eugenia uniflora</i> <i>Ficus carica</i>	<i>Fortunella japonica</i> <i>Galinzoga hispida</i> <i>Grevillea robusta</i> <i>Hamelia erecta</i> <i>Heliotropium indicum</i> <i>Hibiscus rosa-sinensis</i> <i>Hicoria pecan</i> <i>Ipomoea batatas</i> <i>Lucuma mammosa</i> <i>Melaleuca leucadendron</i> <i>Piper auritum</i> <i>Terminalia catappa</i> <i>Zea mays</i>

Insect and locality	Collected on	Date and notes
<i>Zizca taeniola</i> (Dallas) San Jose San Pedro	<i>Amaranthus paniculatus cruentus</i> <i>Amaranthus spinosus</i> <i>Brassica oleracea capitata</i>	January April July to September
	<i>Chayota edulis</i> <i>Citrus aurantium</i> <i>Cucurbita pepo</i> <i>Verbena</i> sp. <i>Zea mays</i>	

HYMENOPTERA

<i>Augochlora seminigra</i> Ckll. Waldeck	<i>Theobroma cacao</i>	July	
<i>Diphtrata maculicollis</i> Cam. San Pedro Waldeck	<i>Annona cherimola</i> <i>Annona muricata</i>	July	A chalcid attacking seed and ruining the fruit
<i>Ectatomma ruidum</i> Roger Waldeck	<i>Theobroma cacao</i>	April July	
<i>Gynopolybia sulfureofasciata</i> Buckl. San Pedro	<i>Annona cherimola</i> <i>Byrsonima crassifolia</i> <i>Cupressus benthami</i> <i>Hedychium coronarium</i>	December January February November	Gather tomentum from leaves of variety of plants.
<i>Halictus pseudotegularis</i> Ckll. Waldeck	<i>Theobroma cacao</i>	July	
<i>Megalopta idalia</i> Smith Waldeck	<i>Theobroma cacao</i>	July	
	<i>Malus sylvestris</i> <i>Mangifera indica</i> <i>Zea mays</i>		

Insect and locality	Man	C o l l e c t e d o n	Date and notes
Polistes major Beauv. San Lazaro			March This wasp inflicts serious sting, causing difficulty in breathing
Rhopalictus lachnes Bachal. San Pedro	Ageratum conyzoides		January
Solenopsis geminata (F.) Siquirres	Bauhinia purpurea Carissa grandiflora Cassia sophora Cestrum macrophyllum Citrus trifoliata Diospyros virginiana	Lagerstroemia speciosa, Mammea americana Polianthes tuberosa Taraxacum officinale	July to February May Fosters <u>Vanduzee</u> segmentata Fowl., and various coccids.
Spilochalcis femorata (F.) Waldeck	Theobroma cacao		July
Tatua tatua (Cuvier) San Pedro San Rafael	Citrus medica Tripsacum latifolia		February
Trigona amalthaea (Oliv.) Alajuela Waldeck	Byrsonima crassifolia Elaeis guineensis		July October
Trigona cupira Smith Waldeck	Citrus limonia Eschscholtzia californica	Myosotis sylvatica Nicotiana tabacum Theobroma cacao	January March April, July
Trigona townsendi Ckll. Pejivalle	Man		February A sweet bee

LEPIDOPTERA

Insect and locality	Collected on	Date and notes
Acraga coa Schaus San Pedro	Citrus nobilis x para- disi	January August
Appropotos melantho (Bates) San Jose	Cyphomandra betacea	August
Automeris boucardi Druce San Rafael	Coffea arabica Trema micrantha	Larva attacked by the wasps <u>Gymnopolybia sul-</u> <u>fureofasciata</u> Buckl. and <u>Parachartergus apicalis</u> (F.)
Bertholdia specularis (H.S.) Guadalupe	Coffea arabica Psidium guajava	February March
Diaphania nitidalis (Stoll) Coyolar San Pedro	Cucumis sativus Cucurbita pepo	February A very serious December pest of melons
Dicentria sabella San Pedro	Lagerstroemia speciosa	March Serious damage to April queen crapemyrtle November, December
Dicentria violascens (H.S.)	Dombeya wallichii Hicoria pecan	December Defoliating trees January
Eantis pallida (Feld.)	Citrus medica Citrus nobilis X para- disi	
Euchaetes mitis Schaus San Pedro	Gonolobus edulis	March, May, June, December, January

Insect and locality	C o l l e c t e d o n	Date and notes
Euglyphis castalia (Druce) San Pedro	Persea americana	April
Euglyphis melancholica (Butl.)	Phoebe tonduzii	September
Gloveria balloui Schaus San Pedro	Conostegia lanceolata Psidium guajava	December January
Halisidota schausi Rothsch. San Pedro	Morus rubra	November
Hemerocampa costaricensis Schaus	Cydonia oblonga Malus sylvestris Persea pittieri	September to March
Lichnoptera cavillator Walk. San Jose San Pedro San Rafael	Anacardium rhinocarpus Annona cherimola Cedrela montana mexi- cana	November to January August
Lycorea atergatis (Doubl. and Hewits.) San Pedro	Ficus carica	November December
Mesocondyla concordalis Hbn.*	Tabebuia pentaphylla	Defoliating trees
Opsiphanes corrosus Stick. San Pedro	Musa paradisiaca	August
Papilio polydamas L. San Pedro	Aristolochia regens	December 21 Ovipositing

* In the Supplement to No. 4 of the Insect Pest Survey Bulletin, Vol. 15, 1935, p. 208, this insect was incorrectly reported as occurring on Couralea rosea.

Insect and locality	C o l l e c t e d o n	Date and notes
Papilio polyxenes stabilis R. and J. San Pedro	Apium ammi	January November
Papilio thoas autocles Rothsch. Sarchi	Citrus aurantium Citrus paradisi	August to February Damaging C. <u>aurantium</u> . Eggs and larvae October 2 to January 4
Phobetron hipparchia Cram. Paso Ancho	Anacardium rhinocarpus Annona cherimola Annona squamosa Calyptranthes costaricensis	September to December
Pieris elodia Boisd. Paso Ancho San Rafael	Brassica pekinensis Tropaeolum majus	February A serious pest December of nasturtium
Plutella maculipennis (Curt.)	Bixa orellana Brassica oleracea botrytis	January to March
Sibine epicalis Dyar	Coffea arabica Hibiscus rosa-sinensis Musa sapientum	January August September
Sibine opheliens Dyar San Pedro	Coffea arabica	March
Stenoma sororia (Zell.) Sarchi	Cinnamomum camphora	August Causes serious injury by eating November seed in pods. Seen December ovipositing on pods August 5.
Utetheisa ornatix (L.) Paso Ancho San Pedro	Crotalaria spectabilis Crotalaria striata	

ORTHOPTERA

Insect and locality	Collected on	Date and notes
Chiriquia serrata Morse Waldeck	Theobroma cacao	April A grasshopper
Chorisoneura gemmicula Hebard Waldeck	Theobroma cacao	April A roach July
Coccothotus ravus Rehn Paso Ancho Tres Rios	Annona cherimola Antigonon leptopus Canangium odoratum Citrus limonia Cupressus benthami Dracaena fragrans Erythrina rubrinervia	A grasshopper Eating lace curtains Serious injury to grapes, roses, etc.
Conocephalus cinereus Thunb. Guadalupe Juan Vinas Paso Ancho	Amygdalus persica Annona cherimola Asparagus officinalis Beta vulgaris crassa Chamaedora bifurcata	February April August September
Ellipes minuta (Scudd.)	Beta vulgaris crassa Brassica oleracea capitata Chrysophyllum cainito Crotalaria spectabilis Cupressus benthami Daucus carota	August
Eriolus longipennis Redt. San Pedro	Citrus sinensis Grevillea robusta Persea americana	November Causes injury December to trees by January oviposition
Eumastax silvicola R. & R. Waldeck	Theobroma cacao	April A grasshopper July

Insect and locality	C o l l e c t e d o n	Date and notes
<i>Euphyllodromia angustata</i> (Latr.) Waldeck	<i>Theobroma cacao</i>	April
<i>Holocompsa azteca</i> Sauss. San Pedro Waldeck	Gramineae (grass) <i>Theobroma cacao</i>	April A roach October
<i>Insara intermedia</i> (Brunn.) Paso Ancho San Jose Tres Rios	<i>Ageratum conyzoides</i> Brassicaceae <i>capitata</i> <i>Chayota edulis</i> <i>Citrus limonia</i> <i>Coffea arabica</i> <i>Coix lacryma-jobi</i> <i>Coleus blumei</i> <i>Cucurbita pepo</i> <i>Eschscholtzia californica</i> <i>Gomphrena globosa</i> <i>Heliotropium peruvianum</i>	October 14 November eggs and adults Serious damage to chayota and geranium
<i>Neoxabea bipunctata</i> (Deg.)	<i>Hedychium coronarium</i> <i>Tabebuia guayacan</i> <i>Tabebuia pentaphylla</i> <i>Terminalia catappa</i>	May August November December
<i>Panchlora cubensis</i> Sauss.	<i>Mangifera indica</i>	December

Insect and locality	C o l l e c t e d o n	Date and notes
Paratettix mexicanus abortus Hancock Las Juntas de Abangares Paso Ancho Tres Rios	Artemisia absinthium Beta vulgaris Coreopsis lanceolata Cucurbita ficifolia Dahlia rosea Daucus carota	Oryza sativa Phaseolus vulgaris Poinsettia pulcherrima Radicula amoracia Saccharum officinarum Solanum tuberosum
Rhipipteryx biolleyi Sauss. Tres Rios	Brassica oleracea capitata Calyptranthes costaricensis Coix lacryma-jobi Daucus carota Fragaria chiloensis Hibiscus rosa-sinensis	Lactuca sativa Phaseolus vulgaris Raphanus sativus Solanum tuberosum Trifolium fragiferum
Schistocerca impleta Walk. San Jose San Rafael	Amaranthus spinosus Asparagus officinalis Bauhinia purpurea Bidens pilosa Byronima crassifolia Citrus paradisi Crotalaria spectabilis Datura candida Dombeya wallichii Dracaena spp. Galinzoa hispida Gerbera jamesoni Grevillea robusta Indigofera suffruticosa	Ligustrum japonicum Lucuma mammosa Lycopersicum esculentum Panicum barbinode Persea americana Poinsettia pulcherrima Sida rhombifolia Thaetsia fruticosa Tripsacum latifolia Zea mays
		January Injuring African August daisy, dracenas, and Citrus paradisi.

Insect and locality	C o l l e c t e d o n	Date and notes
Stilpnoclora azteca (Sauss.) San Pedro	Amygdalus persica Citrus sinensis Coffea arabica Dombeya wallichii Fortunella japonica Ligustrum japonicum	February March August September November December
Taenioptera varipennis Rehn San Jose	Chayote edulis Coix lacryma-jobi Ipomoea tilincea Nephrolepis sp.	July to October December
I S O P T E R A		
Nasutermes costalis Holmg. Waldeck	Theobroma cacao	July
D E R M A P T E R A		
Metrosura ruficeps Scudd. Curridabat San Pedro	Citrus sinensis Daucus carota	January Eating carrots November in a pantry. Eating bark from base of orange tree.
T H Y S A N O P T E R A		
Liothrips zetekii Hood San Jose	Persea americana	November to May August A serious pest
Selenothrips rubrocinctus (Giard) Santa Rosa	Theobroma cacao	July

